

[Changes from Draft #1 to the current regulation are already incorporated]

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PART 5

Standards for Toxic Air Contaminants and Hazardous Air Pollutants

REGULATION 5.01 General Provisions

Air Pollution Control District of Jefferson County
Jefferson County, Kentucky

Relates To: KRS Chapter 77 Air Pollution Control

Pursuant To: KRS Chapter 77 Air Pollution Control

Necessity And Function: KRS 77.180 authorizes the Air Pollution Control Board to adopt and enforce all orders, rules, and regulations necessary or proper to accomplish the purposes of KRS Chapter 77. This regulation establishes the general provisions for toxic air contaminants, the requirement for environmental acceptability of toxic air contaminant emissions, and the requirement that new or modified processes or process equipment comply with all applicable emission standards upon commencing operation the federal requirements for hazardous air pollutants.

SECTION 1 Definitions

Terms used in this regulation that are not defined in this regulation shall have the meaning given to them in Regulation 1.02 *Definitions*. As used in the Part 5 regulations, the following terms shall have the meaning given to them in this section.

1.1 “Benchmark ambient concentration” means the concentration of a toxic air contaminant that is used in determining environmental acceptability pursuant to Regulation 5.21 *Environmental Acceptability for Toxic Air Contaminants*.

1.1.1 The benchmark ambient concentration for a carcinogen (BAC_C) is the concentration, including an averaging time frame, of a toxic air contaminant that is representative of an additional lifetime cancer risk of one in one million (1×10^{-6}). The benchmark ambient concentration for a carcinogen is established pursuant to Regulation 5.20 *Methodology for Determining Benchmark Ambient Concentration for a Toxic Air Contaminant* Section 3.

1.1.2 The benchmark ambient concentration for the noncarcinogenic effects of a toxic air contaminant (BAC_{NC}) is the concentration, including an averaging time frame, of a toxic air contaminant that is likely to be without an appreciable risk of deleterious effects during a lifetime. The benchmark ambient concentration for the noncarcinogenic effects of a toxic air contaminant is established pursuant to Regulation 5.20 Section 4.

1.2 “Category 1 TAC” means a toxic air contaminant listed in Regulation 5.23 *Categories of Toxic Air Contaminants* Section 1.

1.3 “Category 21A TAC” means a toxic air contaminant listed in Regulation 5.23 Section 2.

1.4 “Category 32 TAC” means a toxic air contaminant listed in Regulation 5.23 Section 3.

1.5 “Category 43 TAC” means a toxic air contaminant listed in Regulation 5.23 Section 4.

1.6 “De minimis emission” means any of the following:

1.6.1 If the estimation of the emission of a TAC that may be contained in a mixture of chemicals is based upon the information contained on the Material Safety Data Sheet (MSDS) for that mixture, then the emission of the TAC is deemed to be de minimis if

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- the concentration of that TAC is less than either of the following:
- 1.6.1.1 For a TAC that is determined to be a carcinogen, 0.1%, or
- 1.6.1.2 For any other TAC, 1.0%,
- 1.6.2 The emissions from a process or process equipment or activity that is included on the
Trivial Activity list that is part of the District's EPA-approved Title V Operating Permit
Program, available on the Internet at "http://www.apcd.org/permit/t5/trivial.pdf",
- 1.6.3 The emissions from a process or process equipment or activity that is included on the
Insignificant Activity list that is part of the District's EPA-approved Title V Operating
Permit Program, available on the Internet at "http://www.apcd.org/permit/t5/
insignificant.pdf", or
- 1.6.4 The emission of a TAC from a process or process equipment that is equal to or less than
the amounts calculated by using the following method:
- 1.6.4.1 Determine the benchmark ambient concentrations pursuant to Regulation 5.20
Methodology for Determining Benchmark Ambient Concentration of a Toxic Air
Contaminant Section 4 and, if the TAC is determined to be a carcinogen, Section 3,
- 1.6.4.2 Multiply the BAC_{NC} (in $\mu\text{g}/\text{m}^3$) by:
- 1.6.4.2.1 0.54 (the 1-Hour Factor in Regulation 5.22 Procedures for Determining the
Maximum Ambient Concentration of a Toxic Air Contaminant Section 2 Table 1)
to derive the pound-per-hour de minimis value for the BAC_{NC} , and
- 1.6.4.2.2 By the applicable (based upon the averaging time period of the BAC_{NC}) Annual,
24-Hour, or 8-Hour Factor in Regulation 5.22 Section 2 Table 1 to derive the
applicable pound-per-averaging time period de minimis value for the BAC_{NC} .
- 1.6.4.3 If the TAC is a carcinogen, multiply the BAC_C (in $\mu\text{g}/\text{m}^3$) by:
- 1.6.4.3.1 0.54 (the 1-Hour Factor in Regulation 5.22 Section 2 Table 1) to derive the
pound-per-hour de minimis value for the BAC_C , and
- 1.6.4.3.2 480 (the Annual Factor in Regulation 5.22 Section 2 Table 1) to derive the annual
pound-per-year de minimis value for the BAC_C .
- 1.6.4.4 If the TAC is not determined to be a carcinogen, then an emission of that TAC that
is less than both the pound-per-hour de minimis value determined in section 1.6.4.2.1
and the applicable pound-per-averaging time period de minimis value determined in
section 1.6.4.2.2 is deemed to be a de minimis emission,
- 1.6.4.5 If the TAC is determined to be a carcinogen, then compare the pound-per-hour
de minimis values derived in sections 1.6.4.2.1 and 1.6.4.3.1 to determine which
value is smaller. An emission of that TAC that is less than both the smaller pound-
per-hour de minimis value and the corresponding applicable averaging time period
de minimis value determined in section 1.6.4.2.2 or 1.6.4.3.2 is deemed to be a de
minimis emission, or
- 1.6.5 The emissions from a new or modified surface coating process, including a coating
change, or process equipment, for which the construction permit application qualifies
under any of the circumstances described in Regulation 5.21 section 1.5, and for which
the potential volatile organic compound emissions are less than 5.0 tons per year.
- 1.76 "Exempt stationary source" means any of the following:
- 1.76.1 A gasoline dispensing facility subject to the provisions of Regulation 6.40 *Standards of*
Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery and

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- Control), that may also include a cold cleaner subject to the provisions of Regulation 6.18 *Standards of Performance for Solvent Metal Cleaning Equipment* Section 4 *Cold Cleaners*. A gasoline dispensing facility does not include the initial transfer of gasoline into the fuel tanks of new motor vehicles at an automobile or truck assembly plant,
- 1.76.2 A stationary source subject to the provisions of Regulation 6.44 *Standards of Performance For Existing Commercial Motor Vehicle And Mobile Equipment Refinishing Operations* or Regulation 7.79 *Standards of Performance For New Commercial Motor Vehicle And Mobile Equipment Refinishing Operations*,
- 1.76.3 A stationary source subject to the provisions of Regulation 5.02 *Adoption of National Emission Standards for Hazardous Air Pollutants* section 3.12 *National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities*, or
- 1.76.4 A stationary source whose only permitted process or process equipment is a cold cleaner subject to the provisions of Regulation 6.18 Section 4.
- 1.87 “Group 1 stationary source” means a stationary source subject to Regulation 2.16 *Title V Operating Permits*.
- 1.98 “Group 2 stationary source” means a stationary source that either:
- 1.98.1 Is not a Group 1 or Exempt stationary source, and has applied for an operating permit pursuant to Regulation 2.17 *Federally Enforceable District Origin Operating Permits* (FEDOOP stationary source), or
- 1.98.2 Is not a Group 1, FEDOOP, or Exempt stationary source, and the actual emissions from the stationary source are 25 or more tons per year individually of sulfur dioxide, particulate matter, volatile organic compounds, or oxides of nitrogen.
- 1.9 “New or modified” process or process equipment means, for a process or process equipment, one of the following:
- 1.9.1 The construction permit is issued on or after [insert the effective date of Version 4 of this regulation] and the process involves the potential emission of a Category 1 or 1A TAC,
- or
- 1.9.2 An administratively complete application for a construction permit is received by the District on or after [insert the effective date of Version 4 of this regulation] and the process involves the potential emission of a Category 2 or 3 TAC but does not involve the potential emission of a Category 1 or 1A TAC, excluding a process or process equipment for which the construction permit application was received by the District before June 30, 2004.

SECTION 2 Applicability

This regulation applies to the owner or operator of any process or process equipment that emits or may emit a toxic air contaminant or hazardous air pollutant or for which a toxic air contaminant or hazardous air pollutant emission standard or other requirement is prescribed in a Part 5 regulation. A new or modified process or process equipment shall comply with all applicable emission standards upon commencing operation.

SECTION 3 General Duty

The owner or operator of a process or process equipment from which a toxic air contaminant is or

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may be emitted shall provide the utmost care and consideration to prevent the potential harmful effects of the emissions resulting from the process or process equipment. A person shall not allow any process or process equipment to emit a toxic air contaminant in a quantity or duration as to that could be harmful to the health and welfare of humans, animals, and plants.

SECTION 4 — New or Modified Process or Process Equipment that May Emit a Toxic Air Contaminant [Note: This is being moved to Regulation 5.21 Section 3]

4.1 — A construction permit required by the provisions of the Part 2 regulations for a new or modified process or process equipment that may emit a toxic air contaminant shall, except as exempted pursuant to section 4.2, incorporate the following provisions:

4.1.1 — The allowed emission standard for a Category 1 or 1A TAC from a Group 1 or 2 stationary source shall have been demonstrated to comply with the environmental acceptability goals of Regulation 5.21 section 2.2 except as provided in Regulation 5.21 section 2.3;

4.1.2 — The allowed emission standard for a Category 2 or 3 TAC from a Group 1 or 2 stationary source shall meet one of the following:

4.1.2.1 — Has been demonstrated to comply with the environmental acceptability goals of Regulation 5.21 section 2.2 except as provided in Regulation 5.21 section 2.3, or

4.1.2.2 — Has been demonstrated to comply with the provisions of Section 3 of this regulation, and

4.1.3 — As determined appropriate by the District, the construction permit shall require the owner or operator of the new or modified process or process equipment to install, calibrate, operate, and maintain a continuous or intermittent emissions or parametric monitoring system. Applicable records shall be maintained for a period of at least 5 years, made available to the District upon request, and submitted to the District as specified in the construction permit.

4.2 — Unless specifically adopted in these regulations, the provisions of sections 4.1.1 and 4.1.2 shall not apply to the following:

4.2.1 — A new or modified process or process equipment regulated pursuant to Regulation 6.40 Standards of Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery and Control) at a gasoline dispensing facility (which does not include the initial transfer of gasoline into the fuel tanks of new motor vehicles at an automobile or truck assembly plant);

4.2.2 — A new or modified process or process equipment regulated pursuant to Regulation 6.44 Standards of Performance For Existing Commercial Motor Vehicle And Mobile Equipment Refinishing Operations or Regulation 7.79 Standards of Performance For New Commercial Motor Vehicle And Mobile Equipment Refinishing Operations;

4.2.3 — A new or modified process or process equipment regulated pursuant to Regulation 5.02 Adoption of National Emission Standards for Hazardous Air Pollutants section 3.12 National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities;

4.2.4 — A new or modified surface coating process, including a coating change, or process equipment for which the potential volatile organic compound emissions are less than 5.0 tons per year, and

4.2.5 — A new or modified cold cleaner subject to the provisions of Regulation 6.18 Standards

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of Performance for Solvent Metal Cleaning Equipment Section 4 Cold Cleaners at a stationary source meeting one of the following:

4.2.5.1 The only permitted process or process equipment at the stationary source is a cold cleaner.

4.2.5.2 The cold cleaner is located at a gasoline dispensing facility identified in section 4.2.1,
or

4.2.5.3 The cold cleaner is located at a stationary source identified in section 4.2.2.

SECTION 5 — Savings Clause

Any emission standard established pursuant to Regulation 5.11 Standards of Performance for Existing Sources Emitting Toxic Air Pollutants or Regulation 5.12 Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants as of [insert the effective date of Version 4 of this regulation] shall remain in effect until replaced with an emission standard established pursuant to Regulation 5.21.

Adopted v1/7-14-76; effective 9-1-76; amended v2/6-13-79, v3/4-20-88.